

SPHERE

Secure Public Health Electronic Record Environment



Division of Public Health
Bureau of Family & Community Health
September 29, 2003

Healthiest Wisconsin 2010: A Partnership Plan to Improve the Health of the Public

- 11 Health Priorities
- 5 Infrastructure Priorities
 - Integrated electronic data and information systems
 - PHIN - Public Health Information Network System of Systems
 - SPHERE is one of the systems

SPHERE Status

- Statewide WI Line Web Training
 - Training and Materials Posted on HAN
- System Roll Out: Aug-Oct
 - 125 Organizations: LHD's, Tribal Agencies & Private Non Profit Agencies
 - 56 agencies have SPHERE access
 - 40 agencies in process of converting old data into SPHERE
 - Others in "limbo"

SPHERE Design

- **Lead Team with State, Regional and Local Representation**
 - **Defined Business Requirements for SPHERE**
 - **SPHERE is a Public Health System for local/state documentation of**
 - Individual/Household Activities
 - Community Activities
 - System Activities

SPHERE helps to document/provide measurements related to:

- DPH Contract Objectives
- Healthiest Wisconsin 2010
 - Health & Infrastructure Priorities
- Broader organizational objectives

SPHERE Developed by UW DoIT

University of Wisconsin Department
of Information Technology

- HAN (Health Alert Network)
- CDC NEDSS Base System (Data Model)
- PHIN

WE-TRAC

SPHERE

West Nile

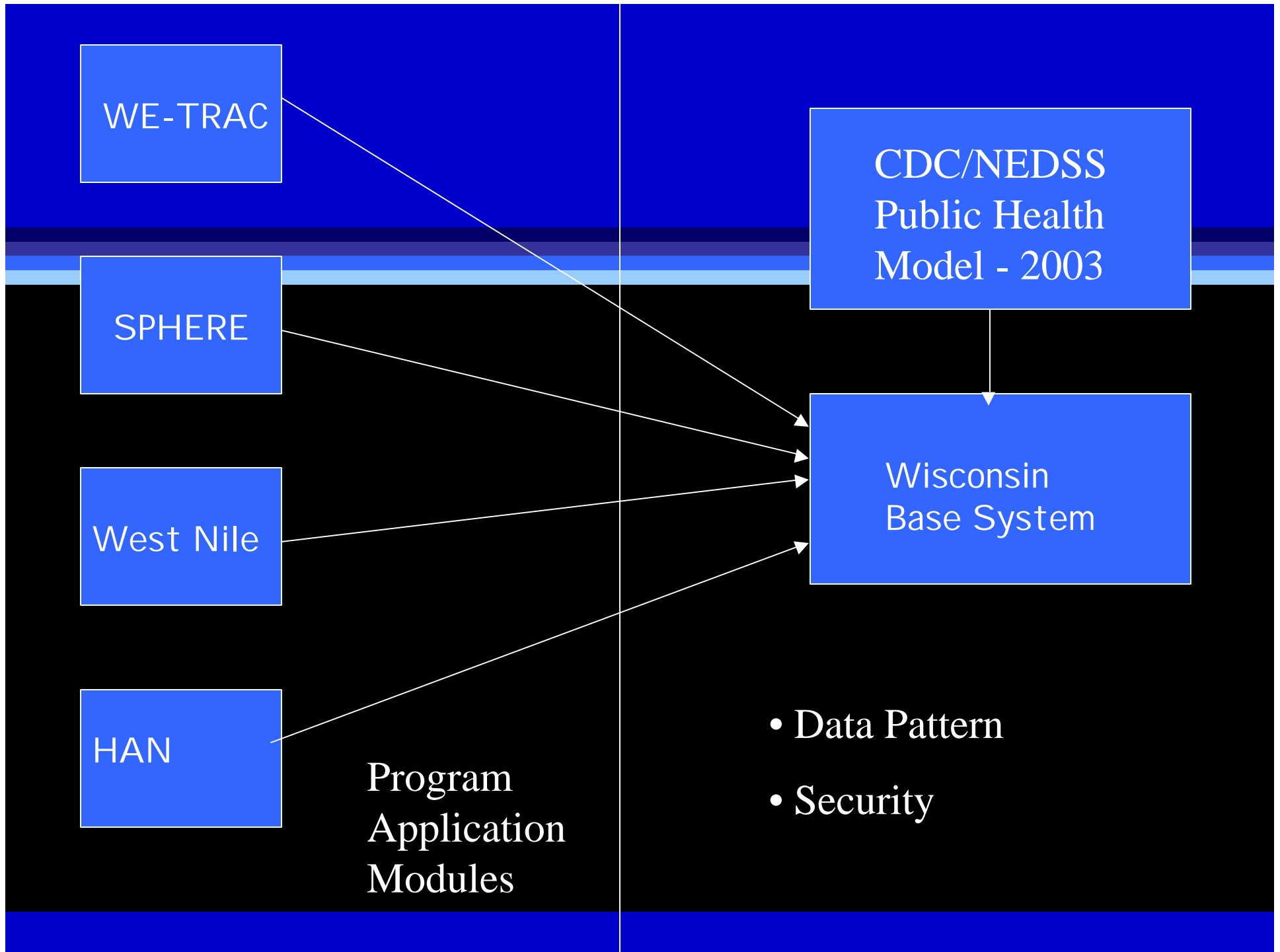
HAN

Program
Application
Modules

CDC/NEDSS
Public Health
Model - 2003

Wisconsin
Base System

- Data Pattern
- Security



HAN is the portal for SPHERE
<https://www.han.wisc.edu>

- All HAN users will not have access to SPHERE
- SPHERE access is granted by the State & Local Organization Administrator(s)

Security and Confidentiality is a High Priority

- DoIT Security
- Security and Confidentiality Policy (includes HIPAA Language)
- All organizations have a Local Organization Administrator
- All user's have a signed agreement
- Role Based Security within the organization

SPHERE

Role Based Security Detail

- Individual/Household demographic data (non health) belongs to SPHERE statewide database
- Individual/Household demographic data (health) belongs to SPHERE local database
- Individual/HH, Community & System activities and interventions belong to SPHERE local database

SPHERE Framework

- SPHERE Uses the “Intervention Model” as the Framework for the System
- This model defines the scope of public health practice by:
 - Level of practice
 - Type of intervention

SPHERE Documents and Evaluates Public Health Activities:

- Using the following levels of practice:
 - Individual/Household (demographics & activities)
 - Community (activities)
 - System (activities)
- Utilizing 18 interventions

SPHERE Activities



Levels of Practice

- Individual/Household activities change knowledge, attitudes, beliefs, practices, and behaviors of individuals and households
- Community activities change community norms, attitudes, awareness, practices, and behaviors
- System activities change organizations, policies, laws, and power structures

SPHERE Statewide Database

- Required client demographics (non health)
 - First and Last Name
 - Ethnicity/Race
 - Date of Birth
- Other client demographics (non health)
 - Includes some privacy information
- NO client health information is maintained in the statewide database

Local Organization Database

- Client Health Demographics
 - Health Information
 - Health Needs
- Individual/Household Activity and Interventions
 - Further protected by role based security
- Community and System Activity and Interventions

Interventions

Actions taken on behalf of individuals, families, systems, and communities to improve or protect health status

Activities defined by 18 Public Health Interventions (Minnesota Model)

- Surveillance
- Disease Investigation
- Outreach
- Case Finding
- Screening
- Delegated Function
- Referral/Follow-up
- Case Management
- Health Teaching
- Counseling
- Consultation
- Collaboration
- Coalition Building
- Community Organizing
- Advocacy
- Social Marketing
- Policy Development
- Policy Enforcement

Subinterventions

- Are specific areas/topics that are connected to each intervention
- Some subinterventions include more specific detailed screens

SPHERE Enhancements

- Birth Records - January
- Medicaid Billing - define requirements in Discovery Report
- Additional detail screens
- Reports - standard and ad hoc reporting